

IN THE CLAIMS:

Claim 1 has been amended as follows:

1. (Currently Amended) A valve assembly comprising:

a valve body having a valve opening therein;

[[a]] an electromagnetic force generator comprising a solenoid coil having a coil axis, said solenoid coil being energizable to generate [[a]] an electromagnetic force;

a shaft in operable connection with said electromagnetic force generator and disposed for reciprocal movement in a direction parallel to said coil axis in response to said electromagnetic force to regulate so as to be movable relative to said valve opening dependent on said electromagnetic force to regulate a degree of opening of said valve opening; and

a bearing assembly guiding said shaft in said movement relative to said valve opening, said bearing assembly comprising a magnet arrangement disposed to magnetically suspend said shaft.

2. (Original) A valve assembly as claimed in claim 1 wherein said magnet arrangement additionally magnetically biases said shaft in a direction to regulate said degree of opening of said valve opening.

3. (Original) A valve assembly as claimed in claim 2 wherein said magnet arrangement magnetically biases said shaft to decrease said degree of opening of said valve opening.

4. (Original) A valve assembly as claimed in claim 2 wherein said magnet arrangement magnetically biases said shaft to increase said degree of opening of said valve opening.

Claim 5 has been amended as follows:

5. (Currently Amended) A valve assembly as claimed in claim [[1]] 6 wherein said force generator is an electromagnetic force generator comprising a solenoid coil having a coil axis, said solenoid coil being energizable to generate an electromagnetic force, and wherein said shaft is disposed for reciprocal movement in a direction parallel to said coil axis in response to said electromagnetic force to regulate said degree of opening of said valve opening.

6. (New) A valve assembly comprising:
a valve body having a valve opening therein;
a force generator energizable to generate a force;
a shaft in operable connection with said force generator so as to be movable relative to said valve opening dependent on said force to regulate a degree of opening of said valve opening; and
a bearing assembly guiding said shaft in said movement relative to said valve opening, said bearing assembly comprising a magnet arrangement disposed to magnetically suspend said shaft and to additionally magnetically bias said shaft, separately from said electromagnetic force, in a direction to regulate said degree of opening of said valve opening.

7. (New) A valve assembly as claimed in claim 6 wherein said magnet arrangement magnetically biases said shaft to decrease said degree of opening of said valve opening.

8. (New) A valve assembly as claimed in claim 6 wherein said magnet arrangement magnetically biases said shaft to increase said degree of opening of said valve opening.